# CHAPTER 2: ECONOMIC TRENDS

The prosperity of Fort Worth is linked to domestic and international changes. During the 1970s and 1980s, the local economy was driven primarily by a large and successful aerospace and defense industry. Substantial cutbacks in defense contracts prompted the City to begin working towards diversifying its economy in the 1990s, largely through small business development. The result is an economy that is today diversified in many industry sectors such as services, trade, manufacturing, transportation, communication, and construction. This diverse workforce helped Fort Worth during the economic downturn, as we continued to fare better than some other cities. However, Fort Worth is not immune to national trends which resulted in significant job losses and slow economic growth.

The Fort Worth area continues to see an increase in the total number of natural gas wells tapping the Barnett Shale throughout the city and surrounding counties, although at a significantly reduced rate from recent years. Although weak natural gas prices have affected the overall production of natural gas across the nation, production rates continue to make Fort Worth a leader in Texas' energy production. Tarrant County is ranked #1 in top gas producing counties by the Texas Railroad Commission. As long as natural gas exploration and production continues in and around Fort Worth, the associated jobs and lease revenue from natural gas wells will continue to contribute to the local economy.

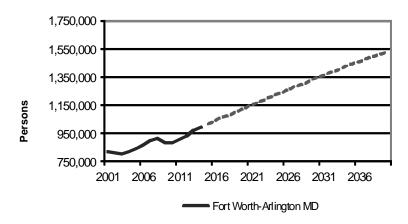
This chapter discusses some of the major economic indicators for the region, details some of the major economic attributes of the City of Fort Worth, and correlates national and international events to regional trends. Assessing these factors provides the basis for making reasoned assumptions about future economic growth and land development needs.

There are three reasons for attempting to assess and predict changes in the economy. First, the costs of providing certain City services are related to the level of economic activity. Industrial and commercial enterprises require water, wastewater, police, fire, environmental, and other services. The costs of providing certain water and wastewater services are partially offset by impact fees, but many other municipal services have no corresponding revenue source. Estimates for quantity and type of streets, public transportation facilities, schools, water and sewer facilities, and other community facilities are all based on the amount and spatial distribution of population and economic activity in the city.

Second, just as it costs money to provide services to businesses, these same businesses provide tax dollars that pay for the services. The City must be able to predict whether a public investment will ultimately pay for itself. The rate at which the economy expands drives growth not only in population, but also in sales taxes, property taxes, hotel taxes, impact fees, and other revenue sources.

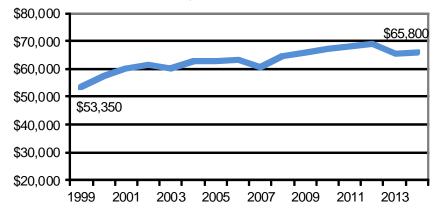
Lastly, knowledge about the economy is useful in predicting land use needs and in

# Employment by Place of Work, 2001-2040



Employment in the Fort Worth-Arlington Metropolitan Division (MD) is forecast to grow, on average, 1.71 percent annually from 2014 through 2040, an increase of 564,198 jobs. (*The Perryman Group, Inc., 2014.*)

# Median Family Income, 1999-2014



Median family income for the Fort Worth-Arlington HUD Metro FMR Area increased from \$53,350 to \$65,800 between 1999 and 2014, an average annual increase of 1.4% over the 15-year period. (Source: U.S. Department of Housing and Urban Development, 2014.)

creating policy. An expanding economy and population generally means more land is being developed. Every sector of the economy uses land in a specific way. By analyzing the growth trends in the various sectors, the amounts of land that will be needed for commercial and industrial uses in the future can be predicted. Policies can be developed to encourage growth in appropriate areas with adequate infrastructure and community facilities while allowing for the efficient provision of additional facilities and services as needed.

#### **Total Employment and Job Growth**

According to the North Central Texas Council of Governments' employment forecast, employment in the City of Fort Worth will continue to rise at a rate of 1.5 percent annually to approximately 701,524 jobs within the city limits in 2030. The Perryman Group, Inc., an economic research and consulting firm, forecasts job growth in the Fort Worth-Arlington Metropolitan Division (MD) to continue, though at a slightly slower rate than that of the late 1990s. Between 1990 and 2000, the Fort Worth-Arlington MD gained jobs at a rate of 3.2 percent per year according to the Perryman Group. Total job growth is expected to slow to 1.6 percent annually through the year 2030 (2013-2030). The Perryman Group forecasts a total of 1,343,247 jobs in 2030 for the Fort Worth-Arlington MD.

The State Comptroller projects that job growth in the State of Texas is expected to slow as well, from 2.1 percent annually from 1990 through 2004 to 1.5 percent annually from 2009 through the year 2030. These projections take into account the slowing of the national economy in the face of increasing global competition, geopolitical conflicts, and tightening labor markets. Rising energy costs may play a further role in limiting job growth as gasoline prices continue to rise over the long term.

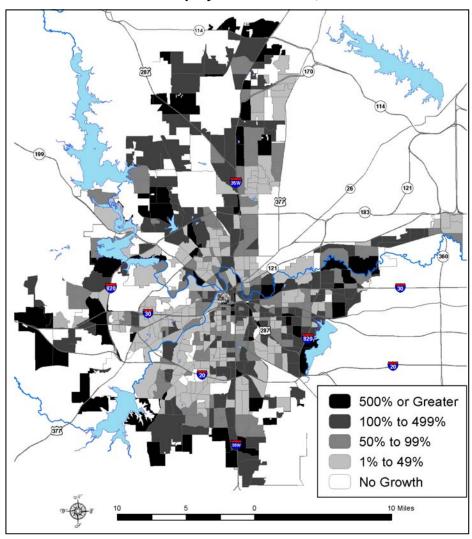
Future job growth will likely be due to Fort Worth's large percentage of undeveloped or underutilized land and a vast ETJ of approximately 300 square miles that is mostly vacant. Moreover, many other cities in the Fort Worth-Arlington MD are landlocked and are rapidly developing the remainder of their vacant land.

#### **Employment by Industry**

The Fort Worth-Arlington MD has a highly diversified economy. The area is an important manufacturing, commercial, transportation, and financial hub and provides a large number of cultural and recreational opportunities. It has also recently become a major area for natural gas exploration and development. According to the Perryman Group, the metro division houses approximately 8.69% of Texas' residents and currently generates 7.80% of the state's real gross product (output) while accounting for 8.40% of the state's total employment. Over the long term, Fort Worth-Arlington MD is predicted to achieve notable growth across a variety of industries. Over the next 5 years the Perryman Group forecasts a total gain of 115,100 jobs in the Fort Worth-Arlington MD, a gain of 2.19% per year.

The following estimates and forecasts of employment by industry are only available

## Fort Worth Employment Forecast, 2005-2040

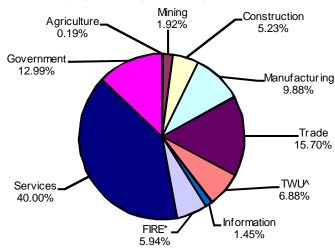


Strong employment growth is forecast for Fort Worth's Far North sector as a result of Alliance Airport's growth and related development. (Source: North Central Texas Council of Governments, 2040 Demographic Forecast, 2011.)

for jobs within the Fort Worth-Arlington MD, the primary area from which Fort Worth draws its workforce. According to the Perryman Group, through the year 2040, all industries in the Fort Worth-Arlington metro area are anticipated to see an expansion in the number of workers.

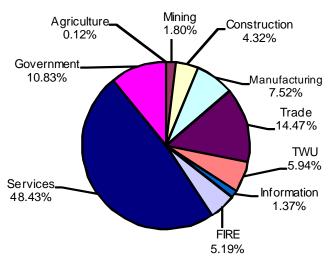
- Historically, the service sector has grown rapidly nationwide. With new, efficient communications, businesses are increasingly able to sell services in distant markets, making services an export commodity. In Texas and nationwide, the service sector experienced slight growth in 2003 and resumed historical growth patterns in 2005. The services sector in the Fort Worth-Arlington MD increased by 60,146 new jobs over the past five years (2010 to 2014), representing the largest employment sector growth, and it is forecast to grow by an additional 358,856 jobs between 2014 and 2040, representing a 2.47 percent compound annual growth rate. The service sector currently accounts for approximately 40% of the Fort Worth-Arlington MD's total wage and salary employment. By 2040, services is projected to be responsible for 48.4% of the workforce in the metro division. The services sector is forecast to account for the largest amount of real gross product gain from 2014 to 2040 for the Fort Worth-Arlington MD. The increase will be approximately \$45.08 billion.
- Trade experienced an increase of 14,238 total jobs in the five years from 2010 to 2014. The trade sector is forecast to grow by 70,132 new jobs between 2014 and 2040, representing a 1.42 percent compound annual growth rate.
- Manufacturing increased by nine percent between 1992 and 1998, largely due to aircraft manufacturing. However, the market experienced a downturn between 2001 and 2006. The manufacturing sector decreased by 7,200 jobs between 2001 and 2006; and again between 2008 and 2010 the industry lost nearly 10,000 jobs. In 2011, the industry began growing and has now recovered from most of the job loss experienced during that time. The industry overall is forecast to increase by 19,977 jobs between 2014 and 2040.
- Government grew by 2,300 jobs between 2010 and 2014. This job increase is reflective of the need for all levels of government to maintain their level of services as the service area continues to grow. The government sector is forecast to grow by 37,858 jobs between 2014 and 2040, representing a 0.96 percent compound annual growth rate.
- Transportation, warehousing, and utilities (TWU) increased by 3,000 jobs between 2005 and 2010, and is forecasted to grow by 23,540 jobs between 2014 and 2040, representing a 1.11 percent compound annual growth rate. According to the Perryman Group, transportation received a large boost in Texas with the implementation of the 1994 North American Free Trade Act (NAFTA), reducing barriers to trade with Mexico. According to the International Trade Administration, Texas exports to Mexico increased from \$50.1 billion in 2005 to \$72.6 billion in 2010. Since the passing of NAFTA, exports from Texas to Mexico have increased 150 percent (\$22 billion in 1995). Total exports from Texas were approximately \$207 billion in 2010. Almost 90 percent of the nation's markets can be reached by truck or rail from Fort Worth within 48 hours. The warehousing industry experienced a downturn but is forecast to revive again, as trade begins to increase. The utilities industry continues to consolidate as a result of deregulation and competition.

## **Employment by Industry, 2014**



Services and trade were the largest employment sectors in the Fort Worth-Arlington MD in 2014. \*FIRE=Finance, Insurance, & Real Estate; ^TWU=Transportation, Warehousing, & Utilities. (Source: The Perryman Group, Inc., 2014.)

# **Employment Forecast by Industry, 2040**



Services and trade are forecast to remain the largest employment sectors in the Fort Worth-Arlington Metropolitan Division in 2040. \*FIRE=Finance, Insurance, & Real Estate; ^TWU=Transportation, Warehousing, & Utilities. (Source: The Perryman Group, Inc., 2014.)

- Construction in the Fort Worth-Arlington MD decreased by nearly 5,930 jobs between 2009 and 2010 due to a decrease in home buildings associated with increased foreclosures and an overall unhealthy housing market. However, between 2010 and 2014, construction employment nearly normalized to pre-crash levels. Employment in construction is forecast to grow by 15,935 jobs between 2014 and 2040, representing a 1.02 percent compound annual growth rate.
- Finance, insurance, and real estate (FIRE) in the Fort Worth-Arlington MD grew by 1,304 jobs between 2010 and 2014, and is forecast to grow by 21,688 jobs between 2014 and 2040, representing a 1.19 percent compound annual growth rate.
- Mining in Texas is dominated by oil and gas production, and this sector tends to suffer in years when crude oil and gas prices are low. The number of operating Texas oil and gas rigs fell to 306 in April 2002, reflecting such a drop in prices. However, exploration in the Barnett Shale helped natural gas production, resulting in an increase rig count to 607 in 2005. The Texas Railroad Commission reported in 2013 that Texas' average rig count was 867, representing about 48 percent of all active rotary rigs in the United States. This is a dramatic increase from 2009 (432), in which Texas experienced a sharp decline from 2008's (898) record year. Mining employment growth has increased by approximately 9,200 jobs in the past five years (2010-2014). Between 2008 and 2009, the Perryman Group reported a decrease of about 3,200 mining related jobs in the Fort Worth-Arlington MD, indicative of the drilling slowdown in Texas that occurred at that time. The mining industry has since rebounded from this employment drop and is projected to continue growing at a rate of 2.38% through the next 5 years.
- Agriculture has remained stable at around 2,000 jobs in the Fort Worth-Arlington MD for the past five years. The industry is forecast to experience no significant growth between 2014 and 2040.

Statewide, approximately 72 percent of wage and salary workers are currently in the services, government, and trade industries. Over the long-term forecast horizon, those three sectors will continue to account for almost 73 percent of employment in the Fort Worth-Arlington metro area.

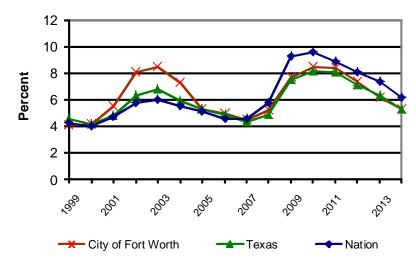
## **Unemployment**

In 2014, the City of Fort Worth unemployment rate was 5.3 percent, equal to the State of Texas unemployment rate. Nationwide, the unemployment rate was 6.2 percent. Unemployment rates have steadily decreased in Fort Worth over the last several years, showing a recovery from the rising rates that began in 2008/9.

## **Real Gross Area Product**

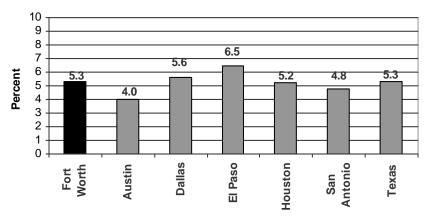
Real gross area product is the final value of all goods and services produced during a given time period, adjusted for inflation. The Perryman Group is the sole source of estimates for regional figures. Within the Fort Worth-Arlington Metropolitan Division, real gross product is projected to grow from \$102.15 billion in 2014 to \$215.08 billion in 2035. Statewide, the Perryman Group projects the real gross state

# Annual Unemployment Rates (1999-2014)



Fort Worth's unemployment rate experienced a spike from 2008 to 2011 due to the national recession, but rates began falling in 2012. The State of Texas and the City of Fort Worth have experienced lower unemployment rates than the nation as a whole during the recession and recovery. (Source: Texas Workforce Commission, 2014.)

# **Average Unemployment Rates, 2014**



The state of Texas and the City of Fort Worth have experienced lower unemployment rates than the nation as a whole during the recession and recovery. Fort Worth's 2014 unemployment rate of 5.3 percent moves the city closer to pre-recession unemployment rates. (Source: Texas Workforce Commission, 2014.)

product to continue to grow at 3.5 percent compounded annually between 2014 and 2035, rising from approximately \$1.35 trillion to \$2.86 trillion. The U.S. real gross domestic product is predicted to continue increasing at approximately 3.22 percent compounded annually according to the Perryman Group.

#### **Retail Sales**

According to the State Comptroller, total retail sales in Fort Worth increased approximately 7.04 percent compounded annually from \$7.88 billion in 2009 to \$11.07 billion in 2013. During the same time period, retail sales in the Fort Worth-Arlington MD grew by 5.81 percent compounded annually (\$27.36 billion to \$36.28 billion), while the Dallas-Plano-Irving MD averaged a 0.73 percent increase compounded annually (\$72.12 billion to \$74.81 billion). In 2013, per capita retail sales in Fort Worth were \$13,967 per person, below the Fort Worth-Arlington MD retail sales of \$15,688 and the Dallas-Plano-Irving MD, which had a per capita retail sales figure of \$16,566 . For the Fort Worth-Arlington MD, the Perryman Group predicts overall retail sales to grow at a 4.23 percent compounded annual growth rate between 2013 and 2040. According to their projections, retail sales in the Fort Worth-Arlington MD will be approximately \$97.73 billion in 2040 an increase of \$65.79 billion from 2013.

### **Personal Income**

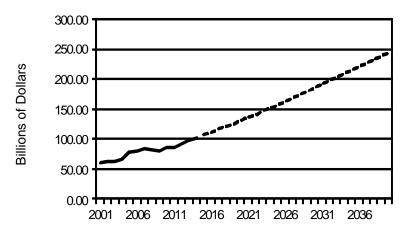
Personal income is the income received by all persons from all sources. Personal income is the sum of net earning by place of residence, property income, and personal current transfer receipts. Personal income is measured before the deduction of personal income taxes and other personal taxes. Per capita personal income for the Fort Worth-Arlington MD was estimated to be \$43,967 in 2013, which was in line with the state average of \$43,862 and slightly below the national average of \$44,765, according to the U.S. Bureau of Economic Analysis. The Fort Worth-Arlington MD figure increased by 4.0 percent annually between 2009 and 2013, well below the rate of inflation for the same period (7.1 percent).

#### **Cost of Living**

The 2014 annual cost of living in the Dallas-Fort Worth area continues to be lower than most other large metropolitan areas in the country, according to the U.S. Bureau of Labor Statistics Consumer Price Index (CPI). In 2014, the Dallas-Fort Worth annual CPI was 218.47, compared to Atlanta at 220.46, Los Angeles at 242.12, and Boston at 254.6. Although CPI figures are not available for the city, evidence indicates that Fort Worth's cost of living is lower than that of many other cities in the Metroplex. Housing represents 42 percent of all items used to calculate the CPI. The median sale price of a home in Fort Worth was \$141,350 in 2014, compared to \$240,370 in Dallas, according to the Real Estate Center at Texas A&M University.

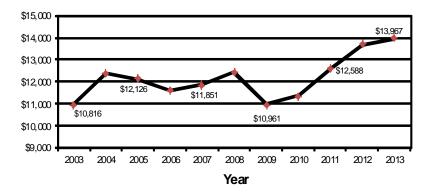
Inflation is the change in the CPI, or the percentage rise in the prices of common consumer items. From 2009 to 2013, the nation as a whole witnessed a 7.9 percent inflation rate from the previous year. During that same period the Dallas-Fort Worth area saw a slightly lower inflation rate of 7.1 percent. By comparison, the inflation rate between 2004 and 2008 nationwide was 12.3 percent while the Dallas-Fort Worth area was 11.4 percent. The Texas Comptroller predicts that the CPI will rise by an average of 2.9 percent per year through 2025.

## Real Gross Product, 2001-2040



Real Gross Product is the adjusted final value of all goods and services produced in an economy during a given time. The Fort Worth-Arlington Metropolitan Division is forecast to continue growing by 3.6 percent compounded annually between 2014 and 2035. (Source: The Perryman Group, Inc., 2014.)

## Per Capita Retail Sales, 2003-2013



Per capita retail sales for the City of Fort Worth dramatically fell 11.8 percent between 2008 and 2009. Total retail sales tax receipts for 2013 were at \$11.2 billion, raising overall per capital retail trade spending to \$13,967 in 2013. (Sources: Texas Comptroller of Public Accounts, 2014.)

#### **Employment by Planning Sector**

The Far North planning sector exhibited the most significant employment growth in the city between 1990 and 2000, adding almost 47,251 jobs at an average annual growth rate of 16.9 percent. The Far North sector's job growth can be attributed primarily to new jobs in the Alliance Airport area, including Alliance Gateway and the Intermodal facility. Jobs were also added in Fossil Creek, Mercantile Center, and Mark IV industrial parks. The Northeast sector added 15,132 new jobs, at an average annual growth rate of 3.3 percent. The Downtown sector ranked third in number of new jobs, with approximately 15,070 new jobs, at an annual growth rate of 2.4 percent. Other growth areas included the TCU/Westcliff sector, with a large new shopping center; the Western Hills/Ridglea sector, which benefited from the recommissioning of the Naval Joint Reserve Base; the Eastside sector, which includes CentrePort and several new retail establishments; and the Northside sector, where the Stockyards have been redeveloped into an entertainment district. Only the Far West sector has performed poorly in job growth, as there has been primarily residential development west of Loop 820.

#### **Unemployment by Planning Sector**

Many parts of the City of Fort Worth have experienced long-term high unemployment rates. Estimates of the civilian labor force and unemployed persons from the American Community Survey 2006 to 2010 by census tract reveal that the Eastside, Northside, Southeast, Southside and Sycamore sectors of Fort Worth had unemployment rates above nine percent. The unemployment rates in these sectors are likely to continue to be high in comparison to the city as a whole for some time. As a whole, the unemployment rate during the range of the American Community Survey for Fort Worth was estimated at 7.42 percent.

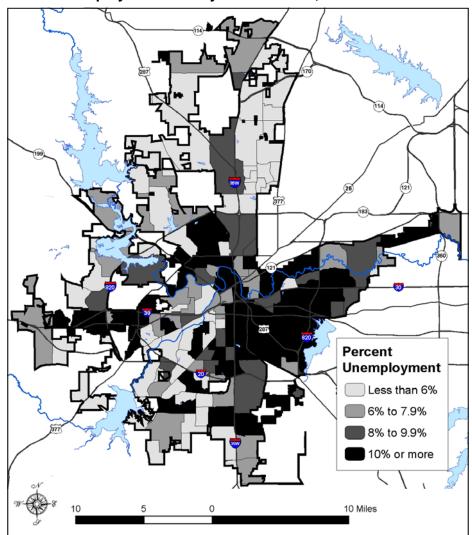
#### Median Household Income by Planning Sector

According to the American Community Survey 2006 to 2010, the Downtown sector had a median household income of \$51,196, just above the citywide median household income of \$49,530. Nevertheless, in the last 20 years, and more rapidly since 2000, Downtown has seen increased residential development of upscale housing.

The effect of the upscale housing market may be better illustrated by analyzing the median family income instead of the median household income in this instance. Median family income analyzes combined incomes of related (by birth, marriage, or adoption) household members where median household income analyzes income levels of one or more unrelated individuals residing together in a housing unit. When looking at the median family income in Downtown, the median increases to \$91,761, well above the citywide median family income of \$56,581.

The Arlington Heights, Eastside, Northeast, Northside, Southeast, Southside, Sycamore and Western Hills/Ridglea sectors all had median household incomes below the citywide median of \$49,530 in the American Community Survey 2006 to 2010. The Far Northwest sector had the highest median household income of \$74,727. The

## Unemployment Rate by Census Tract, 2008 to 2012



Unemployment is highest in census tracts located in the Northside, Southeast, and Southside sectors of Fort Worth. (Source: U.S. Census Bureau, American Community Survey 2008 to 2012.)

Far Southwest sector also had a relatively high median household income of \$71,815. The Wedgwood and TCU/ Westcliff sectors had the highest median incomes of all central city sectors, both above the citywide median household income.

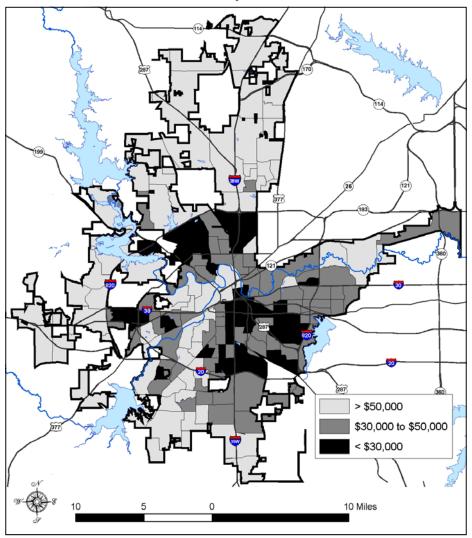
#### **Challenges and Opportunities**

The changing economy provides Fort Worth with several challenges and many opportunities. The national, state, and local economies began emerging from a slowdown after September 11, 2001. Fort Worth fared well during this time due to its diverse economy and its close proximity to Alliance and D/FW airports and the NAFTA Interstate 35 corridor. In addition, the community's pro-business stance has helped diversify the Fort Worth economy.

Between 2002 and 2007, Fort Worth and the entire Metroplex experienced strong economic growth. However, the national recession in 2008 began to impact Fort Worth in 2010, with local unemployment rising from 4.6 percent in 2007 to 8.5 percent by the end of 2010 (compared to 9.7 percent for the nation). The current recession was slow to affect Fort Worth and its negative impacts were not as severe in Fort Worth as was the case in many other parts of the country.

These factors provide Fort Worth with a firm foundation for growth in future years. However, the policies and programs of the City must be continuously examined to ensure that they help mitigate the impacts of a slowing economy and rising long-term energy costs, while promoting Fort Worth's economic strengths.

## Median Household Income by Census Tract, 2008 to 2012



Incomes are highest in the Far North, Far Northwest, Far Southwest, TCU/Westcliff, and Wedgwood sectors. (Source: U.S. Census Bureau, American Community Survey 2008 to 2012.)